ABSTRACT

The present invention is a method for transmitting a data field of symbols. A first data field of symbols is generated and encoded to produce a second data field having complex conjugates of the symbols of the data field. The first and second data fields are then spread, wherein the first data field is spread using a first channelization code and the second data field is spread using a second channelization code. Each of the channelization codes are uniquely associated with one of a first and second antenna. An RF signal including the first and second spread data fields is then transmitted over a first and second antenna.